

Fig. 1 Amino acid sequence of AK38 and peptides

The DNA sequence encoding AK38 protein and its corresponding amino acid sequence.

The vertical lines separate the individual peptides, P1, P2, P3, P4, P5, P6, and P7. There are six cysteine units; each separates two peptides

ATG ATC GTT CCA AGC CTA GGG CCT CCT TCT GAA CAA GAC TGT ATG
Met Ile Val Pro Ser Leu Gly Pro Pro Ser Glu Gln Asp Cys Met
|-----P1-----|

TTT GGG AAT GGG AAA GGA TAC CGG GGC AAG AAG GCA ACC ACT GTT
Phe Gly Asn Gly Lys Gly Tyr Arg Gly Lys Lys Ala Thr Thr Val
-----P2-----

ACT GGG ACG CCA TGC CAG GAA TGG GCT GCC CAG GAG CCC CAT AGA
Thr Gly Thr Pro Cys Gln Glu Trp Ala Ala Gln Glu Pro His Arg
-----|-----

CAC AGC ACG TTC ATT CCA GGG ACA AAT AAA TGG GCA GGT CTG GAA
His Ser Thr Phe Ile Pro Gly Thr Asn Lys Trp Ala Gly Leu Glu
-----P3-----

AAA AAT TAC TGC CGT AAC CCT GAT GGT GAC ATC AAT GGT CCC TGG
Lys Asn Tyr Cys Arg Asn Pro Asp Gly Asp Ile Asn Gly Pro Trp
-----|-----P4-----|

TGC TAC ACA ATG AAT CCA AGA AAA CTT TTT GAC TAC TGT GAT ATC
Cys Tyr Thr Met Asn Pro Arg Lys Leu Phe Asp Tyr Cys Asp Ile
|-----P5-----|-----P6

CCT CTC TGT GCA TCC TCT TCA TTT GAT TAA
Pro Leu Cys Ala Ser Ser Ser Phe Asp ***
-----|-----P7-----|

09927006-080904

Fig. 2 Anti-angiogenic activities of P1, P2, P3, P4, P5, P6, P7 and AK38 kringle *in-vitro*. The concentration of each peptide is 1 μ M and the results are the average of three.

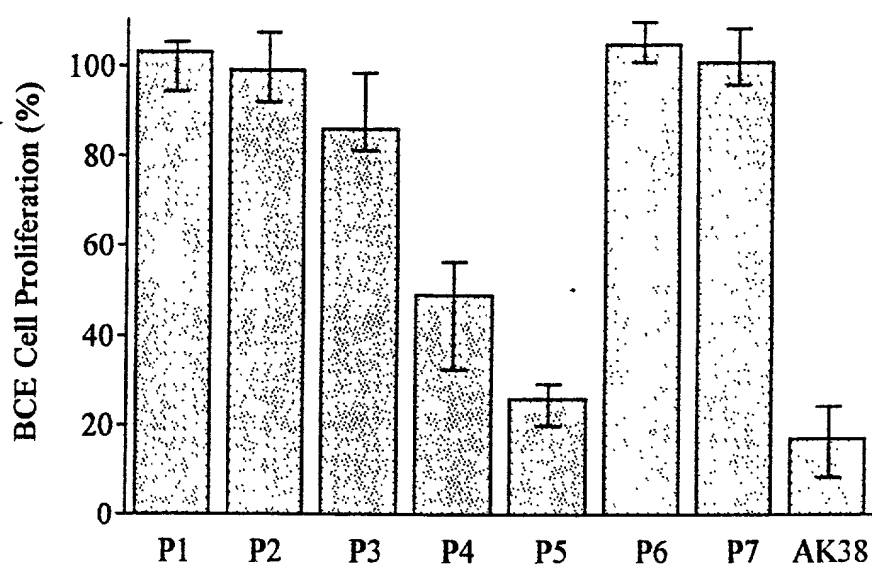


Fig. 3 Mass spectrum and HPLC chromatogram of P4. An extra peak of 1303.82 was about 22 Da higher than the expected molecular weight of peptide P4. This peak was assumed to be the peptide P4 molecule associated with a sodium ion.

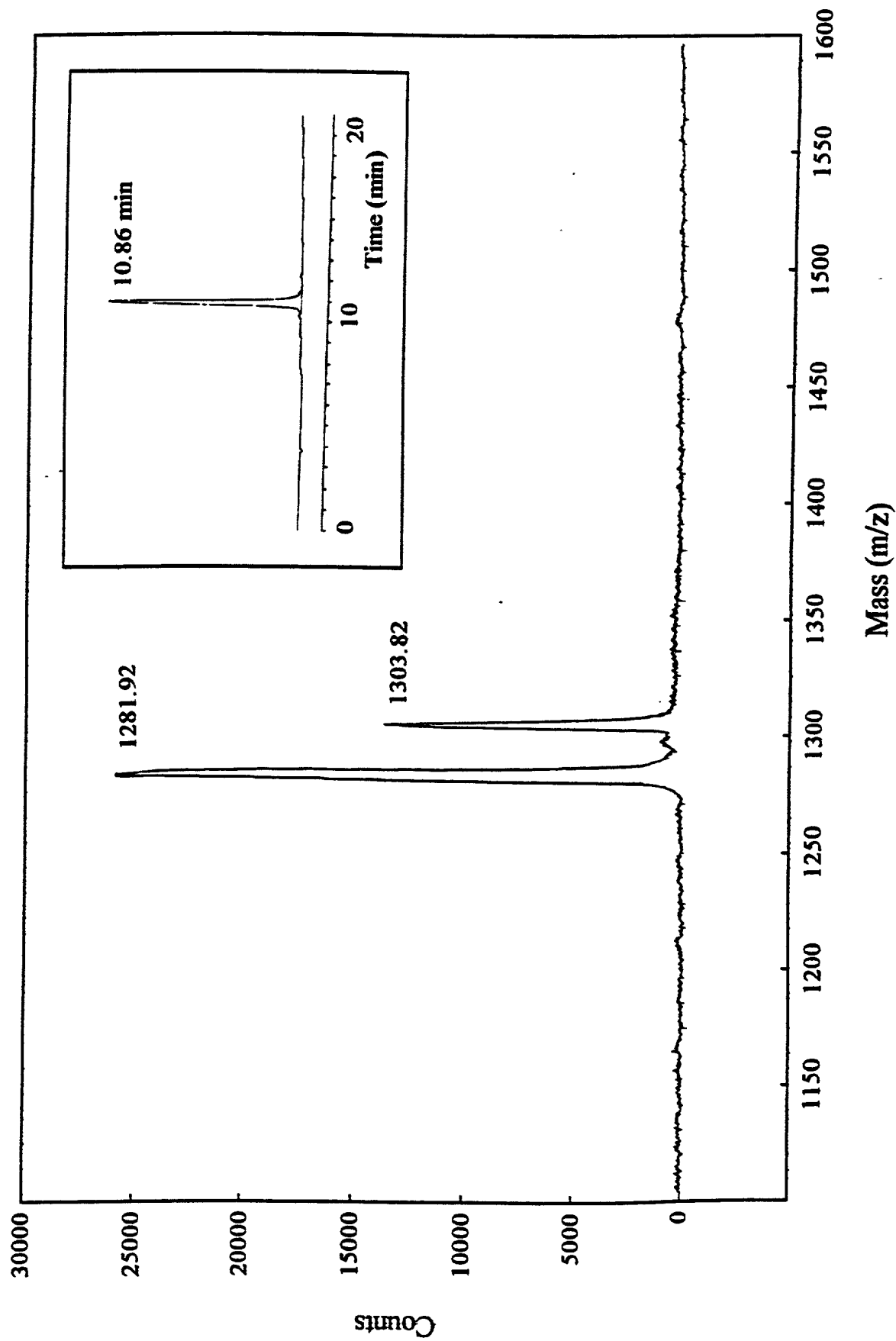


Fig. 4 Mass spectrum and HPLC chromatogram of P5

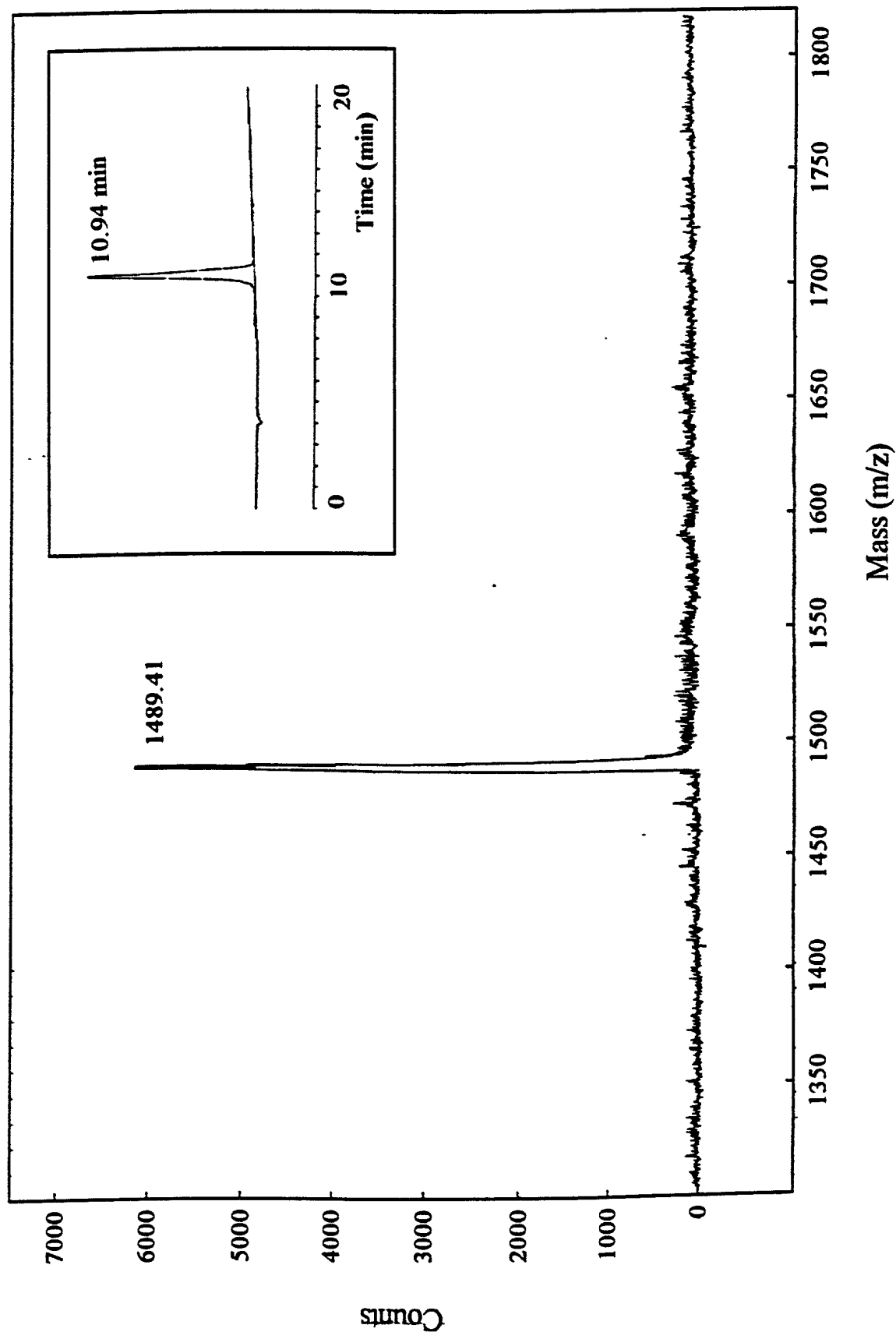


Fig. 5 Location of P4 and P5 on the AK38 kringle

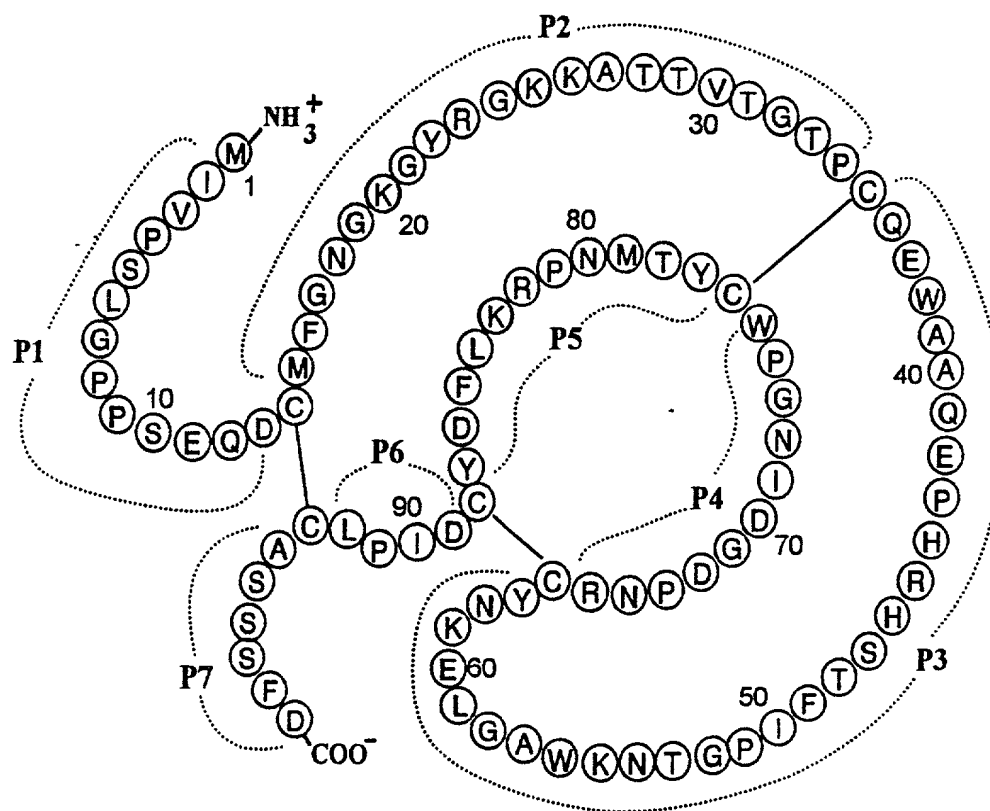


Fig. 6 Anti-angiogenic activities of P4 and P5 individually and collectively

